

What is claimed is:

1. A substantially pure tumor suppressor nucleic acid molecule comprising at least fifteen contiguous nucleotides of SEQ ID NO:2, or a functional 5 fragment of said molecule.

2. The substantially pure tumor suppressor nucleic acid molecule of claim 1, comprising the nucleotide sequence of SEQ ID NO:18, or a functional fragment of said molecule.

10 3. A substantially pure tumor suppressor nucleic acid molecule comprising substantially the same nucleic acid sequence as SEQ ID NO:5, or a functional fragment thereof.

15 4. A substantially pure tumor suppressor nucleic acid molecule encoding substantially the same amino acid sequence as SEQ ID NO:6, or encoding a functional fragment thereof.

20 5. A substantially pure tumor suppressor nucleic acid molecule comprising at least fifteen contiguous residues of the nucleotide sequence set forth as SEQ ID NO:4, or a functional fragment of said molecule.

25 6. A substantially pure hairpin ribozyme nucleic acid molecule, comprising a sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

7. A substantially pure tumor suppressor polypeptide, comprising substantially the same amino acid sequence as SEQ ID NO:6, or a functional fragment thereof.

5 8. A substantially pure antibody or antigen binding fragment thereof specifically reactive with the polypeptide of claim 7.

9. A method of detecting a neoplastic cell in a sample, comprising:

10 (a) contacting the sample with a detectable agent specific for the tumor suppressor nucleic acid molecule of claims 1, 2, 3, 4 or 5; and

15 (b) detecting said nucleic acid molecule in said sample, wherein altered expression or structure of said nucleic acid molecule indicates the presence of a neoplastic cell in said sample.

10. A method of detecting a neoplastic cell in a sample, comprising:

20 (a) contacting the sample with a detectable agent specific for the tumor suppressor polypeptide of claim 7; and

25 (b) detecting said polypeptide in said sample, wherein altered expression or structure of said polypeptide indicates the presence of a neoplastic cell in said sample.

*Robert C.S.*